March 8, 2016

FAQ: Sites Reservoir Diversion

How much water could have been diverted into Sites Reservoir from this winter's storms if the reservoir existed today?

Through February 2016, using diversion criteria associated with Alternative C facilities, **over 500 thousand acre-feet** (taf) could have been diverted to Sites Reservoir this water year, which began October 1, 2015. This estimated diversion amount is about 28% of the total capacity of the potential project and about 93% of the average diversion to Sites according to operations simulations.

Our diversion criteria include several daily hydrologic condition checks:

1. Delta Status: if the Delta is in "excess" according to DWR's Operations Control Office.
2. Sacramento River Flow: if the flows of the Sacramento River at Freeport and the diversion locations are greater than the required minimums.

If these criteria are met, then diversions would be possible. The above diversion criteria and flow data are available online from Department of Water Resources through the California Data Exchange Center and the State Water Project Operations Control Office. This calculation assumes that all three conveyance options would be used. The daily diversion capacities are:

Tehama-Colusa Canal	4,158 Acre-Feet/day
Glenn-Colusa Canal	3,564 Acre-Feet/day
Delevan Pipeline	3,960 Acre-Feet/day
Total Diversion to Sites	11,682 Acre-Feet/day

For Water Year 2016, excess Delta conditions began January 6th and remain in excess as of this writing. Due to ongoing drought and limited rainfall and runoff, excess Delta conditions were not present from October through December 2015. Diversions for Sites Reservoir would have been allowed beginning January 7, continuing through February 29 (54 days). During that period, maximum diversion was possible for 24 days. Because of the recent storms, diversion conditions are likely to continue for several more weeks. Sites Reservoir does not fill quickly during a storm, but does take advantage of the relatively long high flow conditions of the Sacramento River that occur for extended periods after larger storms. This occurred during the January and February 2016 storms, where excess conditions occurred in the Delta beginning on January 6th, and continue, as described. Total potential diversion through the end of February was 505 taf.

It is important to emphasize that the performance of Sites Reservoir during drought is not necessarily best measured by ability to divert during a drought period. As with most large storage systems, the drought performance is better determined by the amount of water in storage before a drought begins and then how quickly storage is depleted during the drought period. Performance during drought is described in "The Drought and Sites Reservoir FAQ."